



SPYWOLF

Security Audit Report



Completed on
April 18, 2023



OVERVIEW

This audit has been prepared for **ELMO** to review the main aspects of the project to help investors make an informative decision during their research process.

You will find a summarized review of the following key points:

- ✓ Contract's source code
- ✓ Owners' wallets
- ✓ Tokenomics
- ✓ Team transparency and goals
- ✓ Website's age, code, security and UX
- ✓ Whitepaper and roadmap
- ✓ Social media & online presence

“

The results of this audit are purely based on the team's evaluation and does not guarantee nor reflect the projects outcome and goal

”

- SPYWOLF Team -





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PROJECT DESCRIPTION

According to their website/whitepaper:

Geisha is a meme token based on the "name given to women who have been accompanying male customers with songs, dances, conversations and games in the entertainment life in Japan since the 17th century. The geisha world is called Hana-machi (花街: Flower town) or Ka-ryu-kai (花柳界: Flower-willow-world) in Japanese."

Release Date: Launched in December, 2022

Category: Meme token



CONTRACT INFO

Token Name
Elmo

Symbol
ELMO

Contract Address

0xCFC5AB97783539151d57B795fe56dA43407a2b33

Network

Ethereum

Language

Solidity

Deployment Date

Apr 17, 2023

Verified?

Yes

Total Supply

10,000,000 ELMO

Status

Launched

TAXES

Buy Tax

2%

Sell Tax

2%

*Taxes cannot be changed in future



Our Contract Review Process

The contract review process pays special attention to the following:

- ✓ Testing the smart contracts against both common and uncommon vulnerabilities
- ✓ Assessing the codebase to ensure compliance with current best practices and industry standards.
- ✓ Ensuring contract logic meets the specifications and intentions of the client.
- ✓ Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- ✓ Thorough line-by-line manual review of the entire codebase by industry experts.

Blockchain security tools used:

- OpenZeppelin
- Mythril
- Solidity Compiler
- Hardhat



TOKEN TRANSFERS STATS

Transfer Count	2407
Uniq Senders	164
Uniq Receivers	284
Total Amount	1236953312.7058675 ELMO
Median Transfer Amount	234556.604285381 ELMO
Average Transfer Amount	513898.34345902264 ELMO
First transfer date	2023-04-17
Last transfer date	2023-04-18
Days token transferred	2

SMART CONTRACT STATS

Calls Count	7981
External calls	543
Internal calls	7438
Transactions count	899
Uniq Callers	233
Days contract called	1
Last transaction time	2023-04-18 14:26:47 UTC
Created	2023-04-17 16:36:35 UTC
Create TX	0xb96e7f46ae34d664d7bbf0d90efbbfda6d12f437e13e938cdb75a4b179641d09
Creator	0xabeea9954fea6294856a7665351d7ec8267d156b



FEATURED WALLETS

Owner address	0x00 Ownership is renounced <i>Original owner: 0xABEaa9954feA6294856a7665351d7eC8267D156B</i>
Marketing wallet	0xd910e0104dec0836E67E0430A8a54C930F3957F0
Development wallet	0xABEaa9954feA6294856a7665351d7eC8267D156B
LP address	Uniswap: 0x3aD26E4774f3708Bd9e980E725f63a6794F3d0D3

TOP 3 UNLOCKED WALLETS

- 1

3.95%

0x7F4F951E8E7b8c7a961C6Bb1F9eCD66667a93CF9
- 2

3.67%

0x96f8B28adE88fD5C03Da49ADBC930144e2a904c4
- 3

3.18%

0xDA7d90326117B97E3Efd1A1731B9F07896558E97



VULNERABILITY CHECK

Design Logic	Passed
Compiler warnings.	Passed
Private user data leaks	Passed
Timestamp dependence	Passed
Integer overflow and underflow	Passed
Race conditions and reentrancy. Cross-function race conditions	Passed
Possible delays in data delivery	Passed
Oracle calls	Passed
Front running	Passed
DoS with Revert	Passed
DoS with block gas limit	Passed
Methods execution permissions	Passed
Economy model	Passed
Impact of the exchange rate on the logic	Passed
Malicious Event log	Passed
Scoping and declarations	Passed
Uninitialized storage pointers	Passed
Arithmetic accuracy	Passed
Cross-function race conditions	Passed
Safe Zeppelin module	Passed
Fallback function security	Passed



THREAT LEVELS

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and access control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time. We categorize these vulnerabilities by the following levels:

High Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Medium Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Low Risk

Issues on this level are minor details and warning that can remain unfixed.

Informational

Information level is to offer suggestions for improvement of efficacy or security for features with a risk free factor.



FOUND THREATS

⚠ High Risk

Development wallet and marketing wallet can initiate manual token swaps from contract and withdraw eth from the contract. If contract's token swap balance is 0 transactions will fail.

```
function manualswap() external {
    require(_msgSender() == _developmentAddress || _msgSender() == _marketingAddress);
    uint256 contractBalance = balanceOf(address(this));
    swapTokensForEth(contractBalance);
}

function manualsend() external {
    require(_msgSender() == _developmentAddress || _msgSender() == _marketingAddress);
    uint256 contractETHBalance = address(this).balance;
    sendETHToFee(contractETHBalance);
}
```

Contract's ownership is renounced.

✓ **Owner does not have any special privileges.**



Informational

Before ownership renouncement owner could:

Enable/disable trading, blacklist address from trading.

Set fees without limit, set max transaction amount without limit.

```
function setTrading(bool _tradingOpen) public onlyOwner {
    tradingOpen = _tradingOpen;
}

function blockBots(address[] memory bots_) public onlyOwner {
    for (uint256 i = 0; i < bots_.length; i++) {
        bots[bots_[i]] = true;
    }
}

function setFee(uint256 redisFeeOnBuy, uint256 redisFeeOnSell,
uint256 taxFeeOnBuy, uint256 taxFeeOnSell) public onlyOwner {
    _redisFeeOnBuy = redisFeeOnBuy;
    _redisFeeOnSell = redisFeeOnSell;

    _taxFeeOnBuy = taxFeeOnBuy;
    _taxFeeOnSell = taxFeeOnSell;
}

function setMaxTxnAmount(uint256 maxTxAmount) public onlyOwner {
    _maxTxAmount = maxTxAmount;
}
```

Contract's ownership is renounced.

 **Owner does not have any special privileges.**



RECOMMENDATIONS FOR

GOOD PRACTICES

1

Consider fundamental tradeoffs

2

Be attentive to blockchain properties

3

Ensure careful rollouts

4

Keep contracts simple

5

Stay up to date and track development

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GOOD PRACTICES FOUND

- ✓ The owner cannot mint new tokens after deployment
- ✓ The owner cannot stop or pause the contract
- ✓ The owner can set a transaction limit, but can't lower it than 1% of total supply
- ✓ The smart contract utilizes "SafeMath" to prevent overflows



WEBSITE

Website URL

<https://elmoerc.com>

Domain Registry

<https://www.godaddy.com>

Domain Expiration

2024-04-17

Technical SEO Test

Passed

Security Test

Passed. SSL certificate present

Design

Simple but nice color scheme and overall layout.

Content

The website is currently being updated with new information to ensure investors understand what the project is about.

Roadmap

Yes

Mobile-friendly?

Yes



elmoerc.com

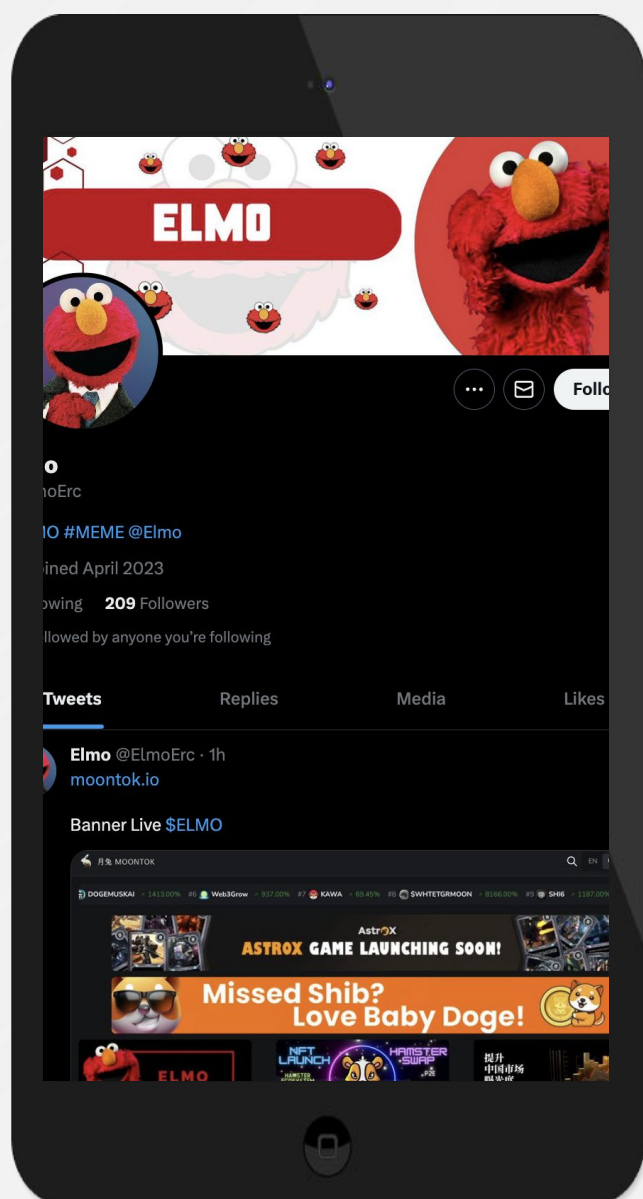


SOCIAL MEDIA & ONLINE PRESENCE



ANALYSIS

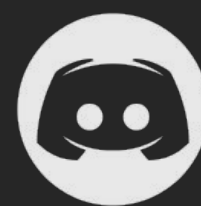
The project's social media presence is new but active.



Twitter

@ElmoErc

- 234 followers
- Daily posts



Discord

- Not available



Telegram

@elmoerc

- 183 members
- Active mods and devs
- Daily announcements



Medium

- Not available



SPYWOLF

CRYPTO SECURITY

Audits | KYCs | dApps
Contract Development

ABOUT US

We are a growing crypto security agency offering audits, KYCs and consulting services for some of the top names in the crypto industry.

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Disclaimer

This report shows findings based on our limited project analysis, following good industry practice from the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, overall social media and website presence and team transparency details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report.

While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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No applications were reviewed for security. No product code has been reviewed.